

Symptom Management Medication Algorithm

GUIDELINES FOR CHOOSING ROUTE

Macy Catheter Administration

- Absorption should be “yes” (refer to chart below)
- Tablets or capsules must be crushable or in liquid formulation
- Avoid Macy if thrombocytopenia, rectal bleeding, or diarrhea present

Traditional PR Administration

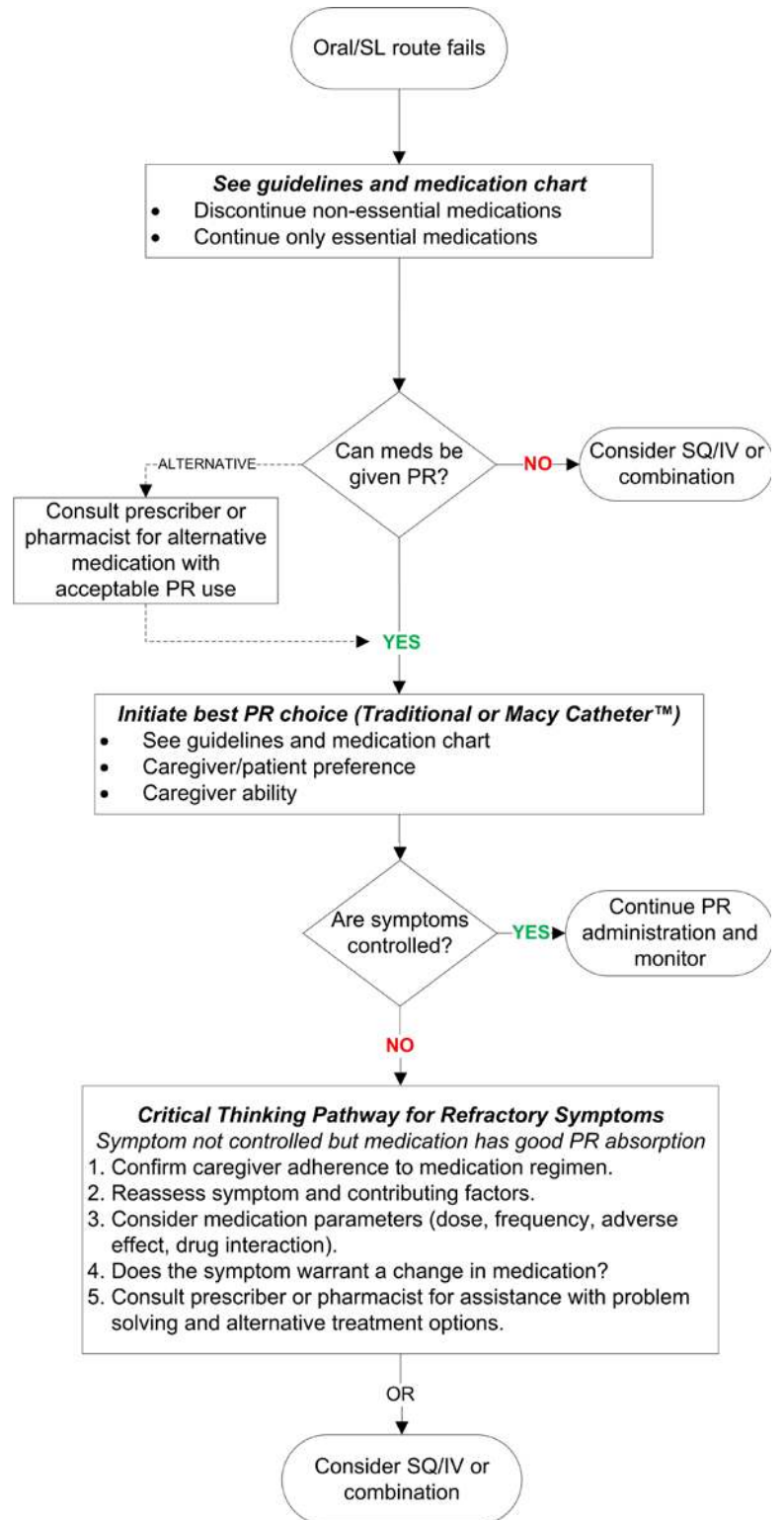
- Absorption should be “yes” (refer to chart below)
- Patient body size too large for PR administration
- Patient & caregiver must accept repeated PR administration
- Caregiver able to safely provide PR administration
- Avoid PR if thrombocytopenia, rectal bleeding, or diarrhea present
- Assess for pain prior to repositioning patient
- Not recommended for longer term management or multiple break through medication doses
- Solid tablets risk slower, delayed, and potentially decreased absorption
- Lag time for delivery if medication formulation not in home

MEDICATIONS ROUTE OPTIONS QUICK CHART

Medication	Crush?	SL?	SQ?	PR?	Macy?
Acetaminophen	✓	✗	✗	✓	✓
Alprazolam	IR	✓	✗	✓	IR
Chlorpromazine	✓	✓	✗	✓	✓
Clonazepam	✓	✓	✗	✓	✓
Dexamethasone	✓	?	✓	✓	✓
Diazepam	✓	✓	✗	✓	✓
Glycopyrrolate	✓	✗	✓	✗	✗
Haloperidol	✓	✓	✓	✓	✓
Lorazepam	✓	✓	✓	✓	✓
Metoclopramide	✓	✓	✓	✓	✓
Ondansetron	✓	✓	✓	✓	✓
Opioids	IR	✓	✓	✓	IR
Phenobarbital	✓	✓	✓	✓	✓
Phenytoin	IR	✗	✗	✗	✗
Prochlorperazine	✓	?	✗	✓	✓
Promethazine	✓	?	✗	✓	✓

✓ = evidence supports use IR = immediate release only

✗ = route not recommended ? = evidence unclear or very limited



ALTERNATIVE ROUTES MEDICATION ADMINISTRATION CHART

Medication	Crush?	SL?*	SQ?	PR?	Macy?	Peds/Adult	Comment
Acetaminophen	Yes	No	No	Yes	Yes	Both	10,27 Review; Commercially available suppositories; oral soln
Alprazolam	IR	Yes	No	Yes	Yes	Adult	1 Review; SL
Amitriptyline	Yes	No	No	Yes	Yes	Adult	1,2 Review, case study; suppository admin; depression
Aspirin	Yes	No	No	Yes	Yes	Adult	13 Case series, PI; suppository admin; Commercially available suppositories
Baclofen	Yes	No	Yes	No	No	Adult	11,12 Case series; PR, crushed tab in water; case report SQ
Carbamazepine	IR	No	No	Yes	Yes	Both	1,3,4,9,17 Review, case series; capsule, suppository admin; neuropathic pain, seizures
Chlorpromazine	Yes	Yes	No	Yes	Yes	Adult	1,27 Review PI; SL; Suppositories no longer commercially available
Clonazepam	Yes	Yes	No	Yes	Yes	Both	8,9,25 Review, OLDF; iv soln, suspension admin
Dexamethasone	Yes	Unk	Yes	Yes	Yes	N/A	No published evidence; clinical experience
Dextroamphetamine	IR	No	No	Yes	Yes	Adult	1,5 Review; suppository admin
Diazepam	Yes	Yes	No	Yes	Yes	Both	9,14,17, 25 Review, case series, PI; tabs, tabs in soln; Commercially available rectal gel
Diclofenac	Yes	No	No	Yes	IR	Adult	3,5 Review; suppository admin; Commercially available suppositories in Canada/International
Diphenhydramine	Yes	ODT	Yes	Yes	Yes	N/A	No published evidence; clinical experience
Doxepin	Yes	No	No	Yes	Yes	Adult	1,3 Review, case series; capsule admin; neuropathic pain
Furosemide	Yes	Yes	Yes	Yes	Yes	Adult	15 Case series; suppository admin
Gabapentin	IR	No	No	No	No	Peds	16 Case report, OLDF; caps opened to water; poor PR bioavailability
Glycopyrrolate	Yes	No	Yes	No	No	N/A	18 Review, SQ; enteral bioavailability too poor for PR or SL admin
Haloperidol	Yes	Yes	Yes	Yes	Yes	N/A	No published evidence; clinical experience
Hydromorphone	IR	Yes	Yes	Yes	IR	Adults	9,19 Review, case series; Commercially available suppositories
Ibuprofen	Yes	No	No	Yes	Yes	Adults	10,20,27,30 Review, case series; ibuprofen in soln
Ketamine	Liquid	Yes	Yes	Yes	Yes	Peds	21,22 Review, BA study; injectable soln admin
Lamotrigine	IR	No	No	Yes	Yes	Both	17 Review, tabs dissolved in water
Levetiracetam	IR	No	No	Yes	Yes	Peds	17 Review, tabs dissolved in water; crushed tabs very bitter/unpalatable for SL
Lorazepam	Yes	Yes	Yes	Yes	Yes	Adults	23,24,25 OLDF, Review, BA study; injectable soln admin
Methadone	Yes	Yes	Yes	Yes	Yes	Adults	9,26,27 Review, BA study; rectal solution
Metoclopramide	Yes	ODT	Yes	Yes	Yes	Adults	9,27 Review; tabs, rectal suspension, suppositories
Midazolam	Liquid	Yes	Yes	Yes	Yes	Both	9,25 Review; injectable soln admin
Morphine	IR	Yes	Yes	Yes	IR	Adults	9,27-29 Review; injectable soln admin, whole ER tabs, Commercially available suppositories
Naproxen	Yes	No	No	Yes	Yes	Adults	10,27,30 Review; suppository admin, oral soln
Ondansetron	Yes	ODT	Yes	Yes	Yes	Adults	27 Review, OLDF; suppository, tablet, oral soln admin
Oxcarbazepine	IR	No	No	No	No	Adults	31 Case series; oral suspension; poor PR bioavailability
Oxycodone	IR	Yes	No	IR	IR	Adults	27,34-36 Review, BA study; suppository admin
Phenobarbital	Yes	Yes	Yes	Yes	Yes	Adults	9,17,27,37 Review, BA study; parenteral solution given PR; aqueous soln
Phenytoin	IR	No	No	No	No	Adults	27,32,33 Review, OLDF, BA study; suppository admin; poor PR bioavailability
Prednisone	Yes	Unk	No	Yes	Yes	N/A	10,27, Review (note: prednisoLONE studies)
Prochlorperazine	Yes	Unk	No	Yes	Yes	N/A	27, Commercially available suppositories
Promethazine	Yes	Unk	No	Yes	Yes	N/A	9,27 Review, Commercially available suppositories
Quetiapine	IR	No	No	Yes	Yes	Adults	39; single dose PK study; PR:PO BA ratio 2:1; consider reduce PR dose to 50% of PO dose
Risperidone	Yes	ODT	No	Unk	Unk	N/A	No data; oral BA 70%
Topiramate	IR	No	No	IR	IR	Adults	17, Review, tabs dissolved in water
Trazodone	Yes	No	No	Yes	Yes	Adults	27,38 Review, case study; suppository admin
Valproate	Liquid	No	No	Yes	Yes	Both	1,6,7,9,17,27 Review, case series; suppository, syrup admin; seizures

*SL administration options based on potential for transmucosal absorption and availability of concentrated solution swallowed with saliva.

Abbreviations:

BA: bioavailability ODT: oral disintegrating tablet PK: pharmacokinetic OLDF: *Off Label Drug Facts* via Facts & Comparisons PI: package insert